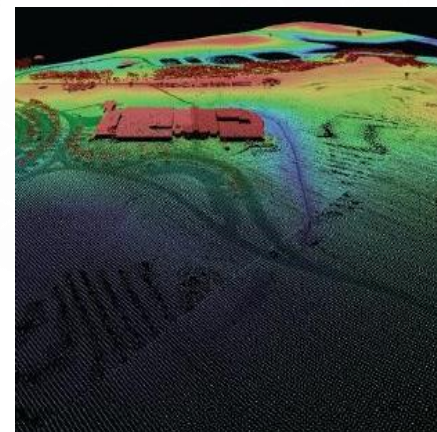
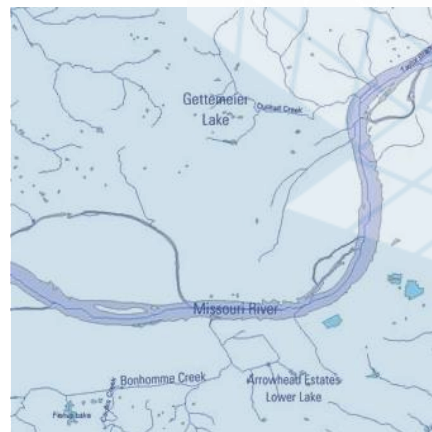
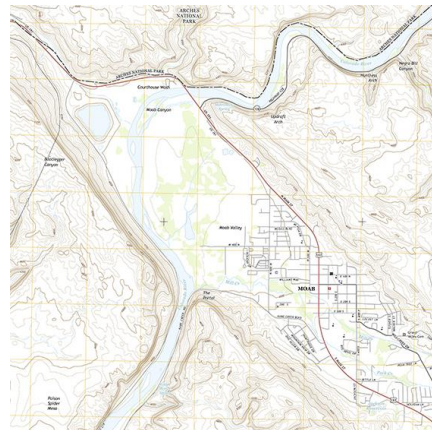




# Michigan 3D Elevation Program (3DEP) State Workshop



gs\_baa@usgs.gov

Charley Hickman  
National Map Liaison to Michigan and Ohio  
June 2, 2015

# + Michigan 3DEP State/Regional Coordination Workshop

## Agenda

- Logistics
- Broad Agency Announcement (BAA) Overview
- SeaSketch Viewer
  - Federal Lidar Acquisition Requirements
  - Public Areas of Interest
- On-going State Coordination efforts
- Presentations of lidar acquisition areas of interest by stakeholder community
- Open discussion and collaboration among stakeholder community on potential projects

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## 3DEP BAA Background – National Map Liaison Roles

- Historically, National Map Liaisons have been directly engaged in project formulation activities for data acquisition
- The BAA was put in place to increase visibility and accessibility of 3DEP partnership opportunities with the USGS. This requires a fair and competitive process. To ensure that no one has an unfair advantage over another, National Map Liaisons must recuse themselves from the formulation and direct coordination of BAA project proposals.
- National Map Liaisons can actively promote goals, objectives and accomplishments of 3DEP; we can promote these forums and the SeaSketch viewer, however we are not able to assist with direct project formulation or partnership coordination prior to project awards. Potential partners are encouraged to continue to engage with others with shared geographic areas of interest.
- Once projects are selected, National Map Liaisons can assist with partnership agreements needed to support the acquisition process

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## Logistics

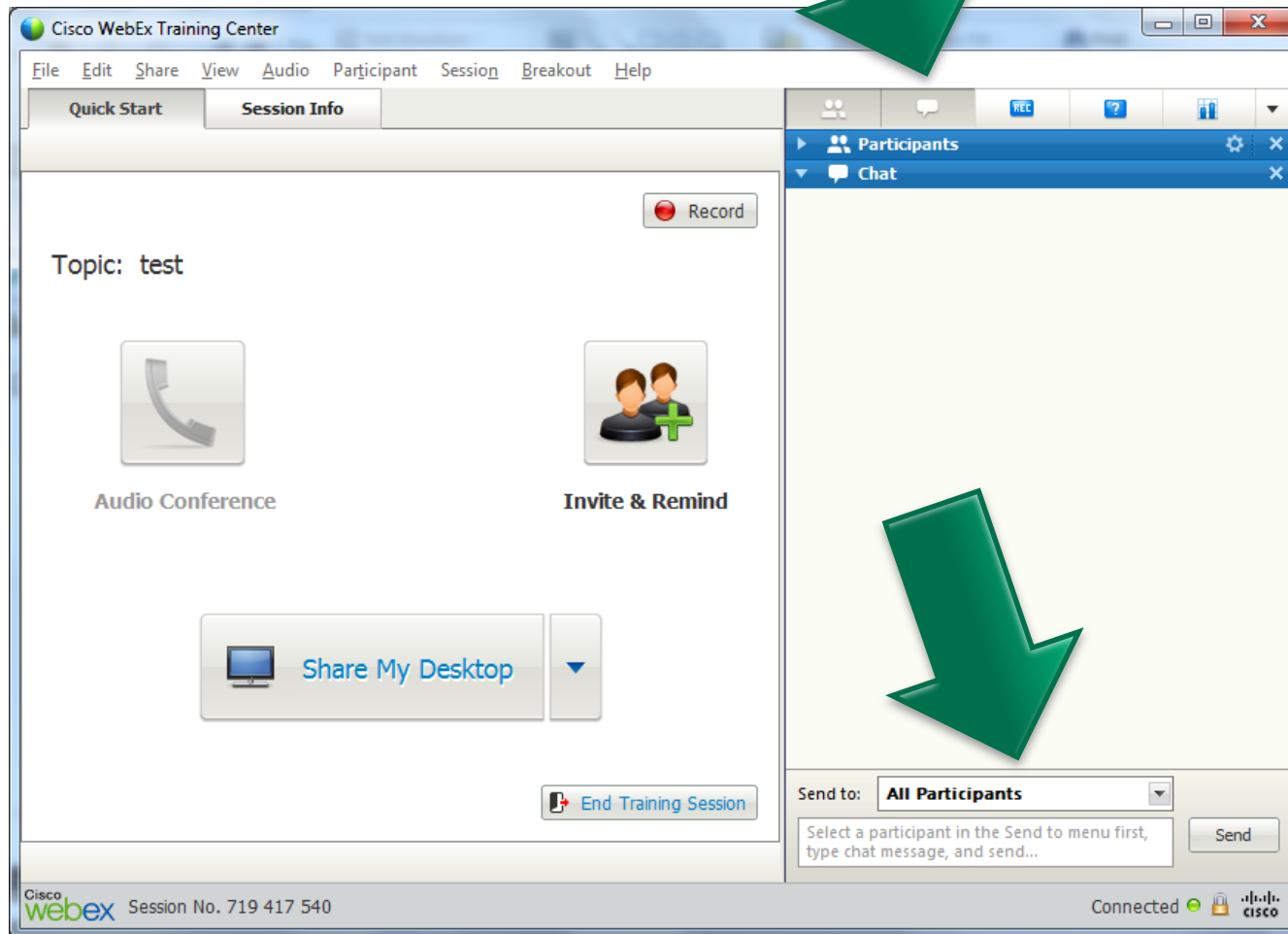
- This meeting consists of both in-person and virtual attendees.
- To accommodate our virtual colleagues, those in the room are asked to speak directly into the microphone.
- Virtual attendees will make use of the chat feature to submit questions – see the panel on the right
  - Submit chat to “all participants”
  - Chat will be saved to assure a thorough response to all questions
- To maintain a similar record, In-person attendees are asked to jot down and submit 3DEP and/or BAA program specific questions on provided index cards
  - Questions passed to 3DEP program office



+

# WebEx Chat

5



# + Michigan 3DEP State/Regional Coordination Workshop

## Logistics

- 3DEP BAA program specific questions will be passed to the 3DEP program office so questions and responses can be added to the BAA FAQ
  - FAQs posted on <http://www.geoplatform.gov/elevation/3DEP/PublicMeetings>
- Program specific BAA questions can also be submitted to the e-mail address [gs\\_baa@usgs.gov](mailto:gs_baa@usgs.gov)
- Meeting attendees are encouraged to continue their interaction subsequent to the meeting by making use of the contact information provided by the presenters.

# 3D Elevation Program (3DEP)

## Resources

*3D Elevation Program (3DEP) FY15/16 Broad Agency Announcement (BAA) Information Sharing Site*

<https://www.geoplatform.gov/elevation/3DEP>

*3D Elevation Program (3DEP)*

*Upcoming Public Meetings (Webinars, Workshops)*

<https://www.geoplatform.gov/elevation/3DEP/PublicMeetings>

*The 3D Elevation Program Initiative – A Call for Action*

<http://pubs.usgs.gov/circ/1399/>

*USGS NGP Lidar Base Specification V1.2*

<http://pubs.usgs.gov/tm/11b4/pdf/tm11-B4.pdf>

*For Further Information Contact: 3D Elevation Program:*

[gs\\_baa@usgs.gov](mailto:gs_baa@usgs.gov)

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## Purpose of meeting

- Provide a basic overview of the USGS Broad Agency Announcement (BAA) process for 3DEP lidar acquisition
- Present Federal agency requirements for lidar acquisition in Fiscal Year 2016
- Provide an opportunity for federal/regional/state/local entities to present information on areas of interest
- Provide a venue where potential proposal submitters can collaborate and cooperate on project formulation.



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## Benefit of coordinated projects

- Larger area projects are more cost efficient
- More cooperators lower costs for each partner in the FY14 BAA that led to the FY15 Awards:
  - The average 3DEP cost share was 36%
  - Proposers are covering an average of 64% of the total cost
  - Many proposals had multiple funding partners
- Eliminates duplicative data collection and provides better value for tax payers

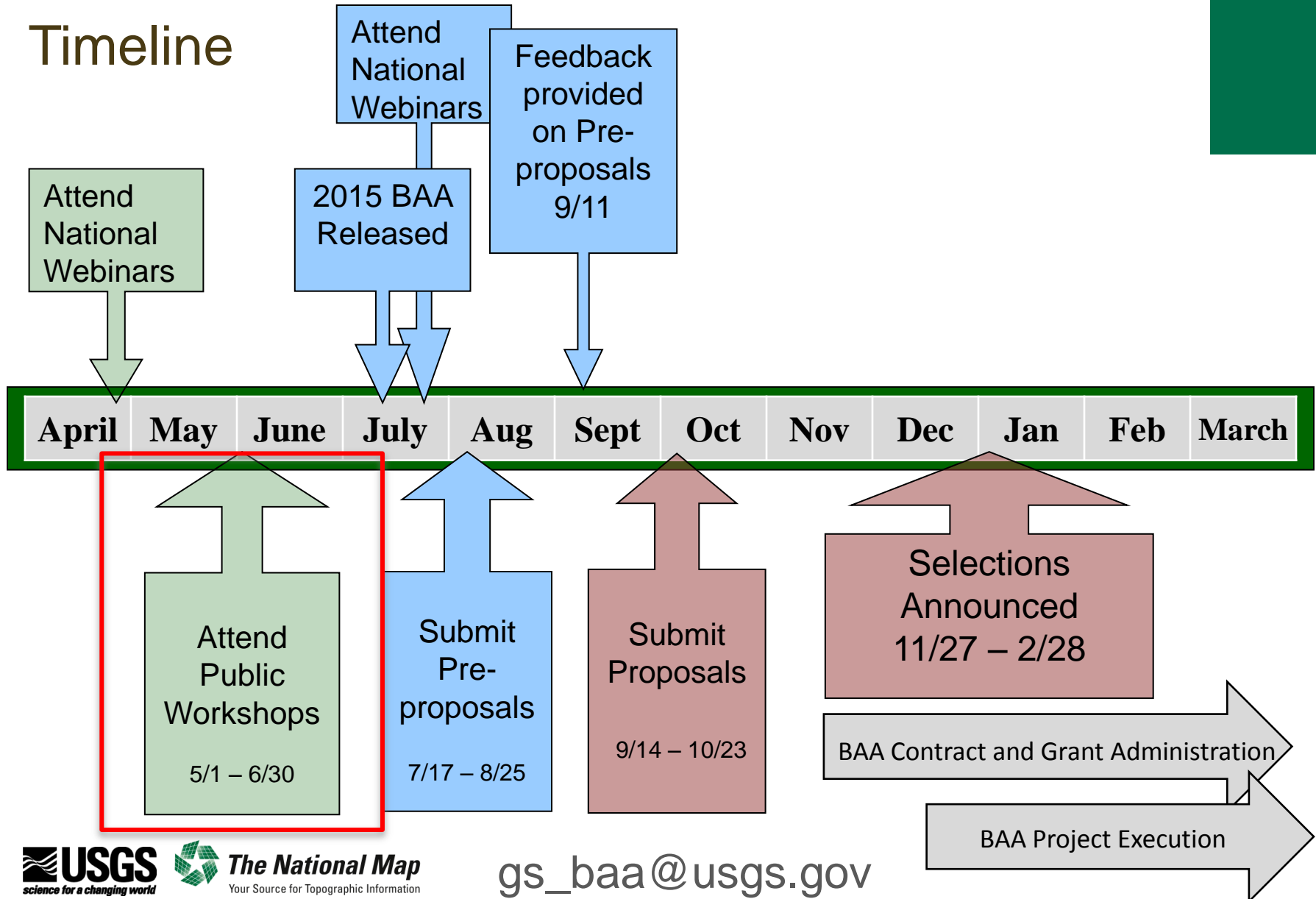
# + Michigan 3DEP State/Regional Coordination Workshop

## What is the 3DEP Broad Agency Announcement (BAA)

- The Broad Agency Announcement (BAA) is the competitive solicitation mechanism which the USGS NGP is using to select and partially fund lidar acquisition projects in support of the 3DEP program.
- The opportunity will be advertised in Federal Business Opportunities (FedBizOpps) <http://www.fbo.gov> and in Grants.gov <http://www.grants.gov>
- Proposals may contribute funds toward lidar data acquisition via the USGS Geospatial Products and Services Contract (GPSC) or they may request 3DEP funds toward lidar data acquisition where the requesting partner contracts for the data acquisition
- Federal agencies, state and local governments, tribes, academic institutions and the private sector are eligible to submit proposals

# + 3DEP FY15 BAA / FY16 Awards

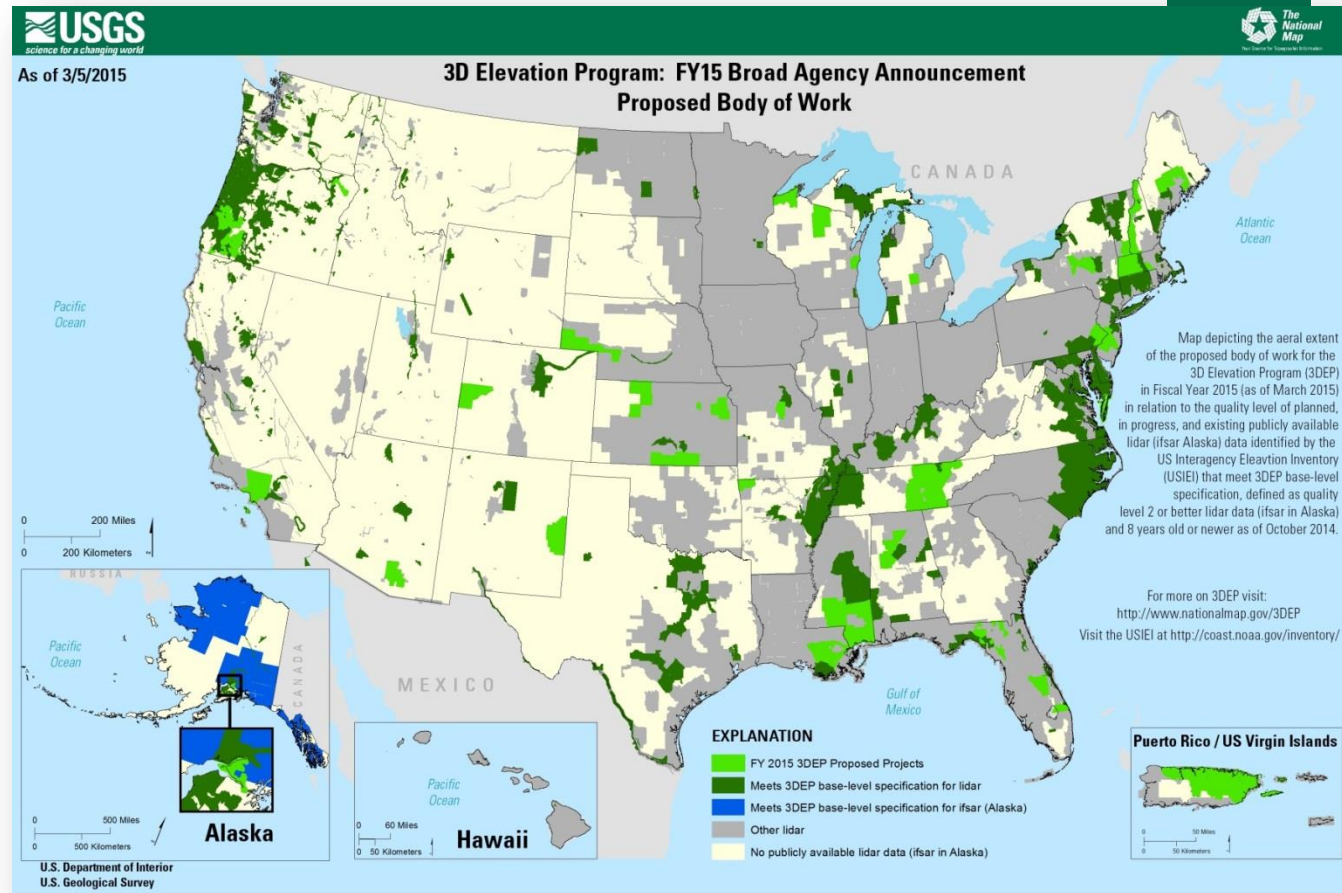
## Timeline



# + 3DEP FY14 BAA/ FY15 Awards

## Summary of awards made in Fiscal Year 2015

- 72 pre-proposals submitted requesting funds over \$50M
- 29 projects were funded
- USGS, FEMA, and NRCS committed \$9.8M, with a total estimated value from partners of \$26.5M



Results available at <http://nationalmap.gov/3dep>  
gs\_baa@usgs.gov

# + 3DEP Program Goals

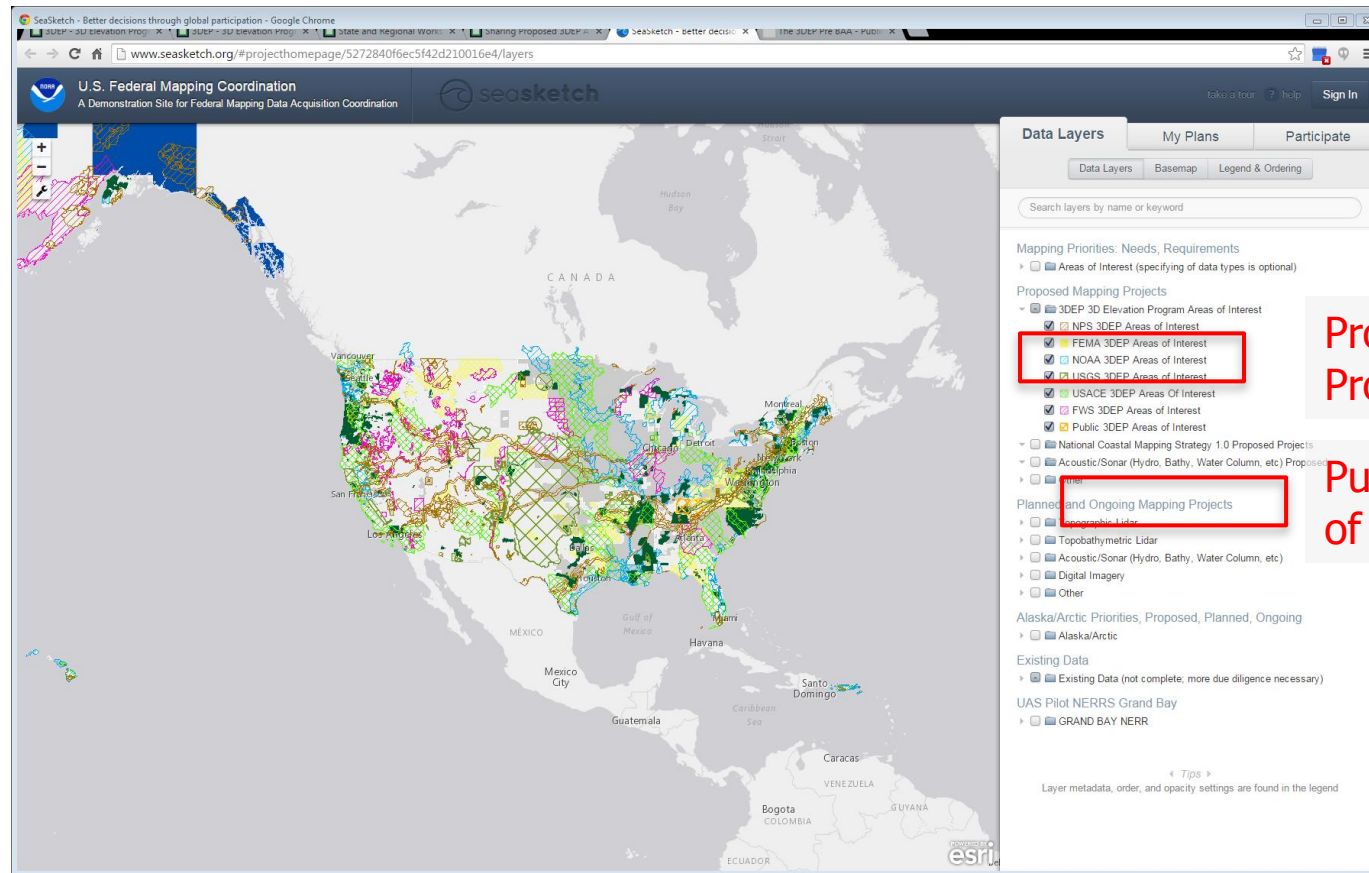
## From 3DEP – A Call for Action (USGS Circular 1399)

- QL2 data that are 8 years old or newer across the conterminous US
- QL5 data in Alaska
- Specifications
  - Must at a minimum adhere to the latest USGS Lidar Base Specification (see resources slide)
  - Higher quality lidar may be acquired through partner buy ups.
- Reduce acquisition costs by increasing project area
- Specific evaluation criteria will be in the BAA announcement and presented during the second set of public webinars which will be held directly after the release of the BAA
- Questions should be directed to [gs\\_baa@usgs.gov](mailto:gs_baa@usgs.gov)

# + 3DEP FY15 BAA / FY16 Awards

## Project Viewer – SeaSketch

<http://seasket.ch/hwpR3E-MxO>



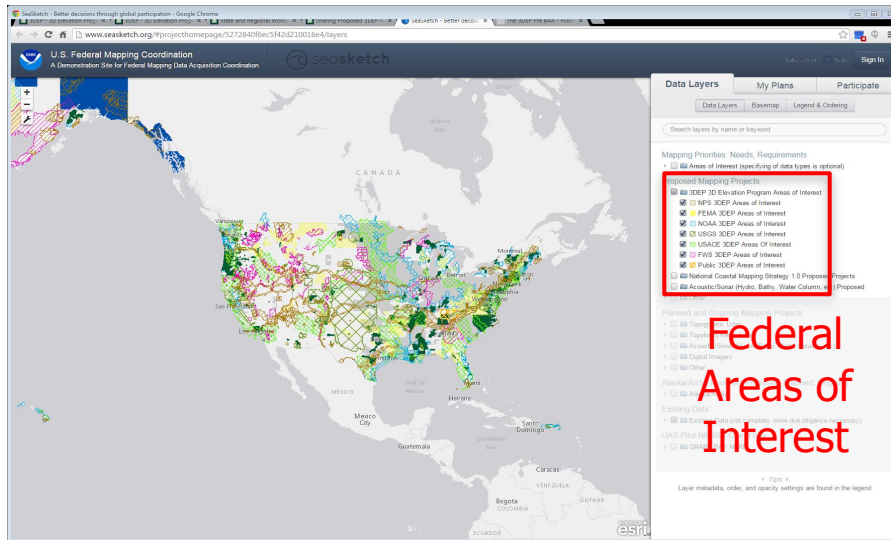
Proposed Mapping Projects

Public 3DEP Areas of Interest



# + Project Viewer – SeaSketch

## Federal Areas of Interest



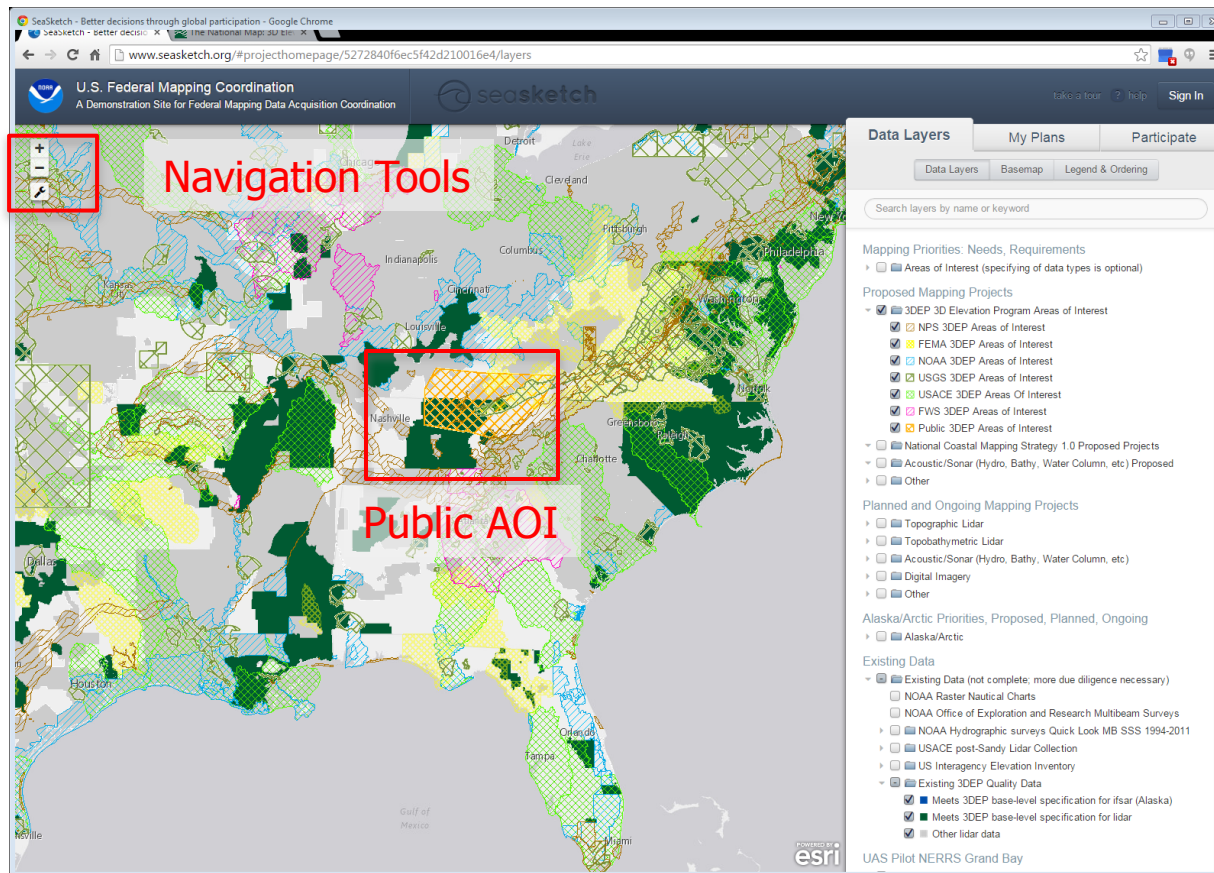
## What is a Federal Area of Interest?

- Area in which a Federal agency has a near term requirement for lidar data
- May or may not have identified funding
- Includes POC information to encourage other 3DEP stakeholders to get in touch to discuss opportunities to leverage funding
- Each Federal Agency operates independently; contact individual agency POCs to discuss agency areas of interest.

# + 3DEP FY15 BAA / FY16 Awards

## Project Viewer – SeaSketch

<http://seasket.ch/hwpR3E-MxO>







# 3DEP FY15 BAA / FY16 Awards

## 3DEP Pre-BAA Area of Interest Project Collector Tool

The 3DEP Pre BAA - Public Areas of Interest Project Collector Tool

**\* Also provide any other important details about your project:**

Include special requirements like higher accuracy requirements, time of year it must be collected, tide coordination requirements, etc.  
Character Limit: 500

**File upload:**

You must define the location of your project by uploading a geospatial file defining the coverage area for your project. Your project area must be represented by a polygon in shapefile or KML format. If you do not have a project file in one of these geospatial formats, use these [instructions](#) to create one using freely available tools.

You can upload a KML, KMZ, or a .zip archive containing a shapefile. A "shapefile" is actually a collection of related files. Be careful to include all the [relevant files](#) in your .zip.

[Upload files](#)

**Submit**

[Exit and clear survey](#)

<http://www.geoplatform.gov/elevation/3DEP/AOIGenerationDirections>

Area of Interest Shapefile or KML Generation | GeoPlatform - Google Chrome

<https://www.geoplatform.gov/elevation/3DEP/AOIGenerationDirections>

**GEOPLATFORM.gov**  
Federal Geographic Data Committee (fgdc)

Overview Data Maps Communities/Agencies Resources Marketplace Dashboards Sign In

**NGDA Elevation Theme Community**  
Home NGDA Datasets

**Area of Interest Shapefile or KML Generation**

There are two free, easy options to create a KML file or shapefile for your potential project. You can use [Google Earth](#). If you already have Google Earth installed, this is probably the easiest option. Otherwise, you will need to download and install the software. You can also create a shapefile using the [SeaSketch](#) Elevation and Bathymetry Coordination site. To use this site, you need to create an account, then you can draw your project area using a map interface.

**How to Make a KML File on Google Earth to Submit as a Project Boundary**

- Download and install Google Earth here: <https://www.google.com/earth/>
- Open Google Earth and zoom to your project area
- Select the "Add Polygon" button in the toolbar at the top of the Google Earth window
- A pop-up will appear asking for details on your new polygon. Give it a name and optional description. Do not press OK yet!

**Google Earth - New Polygon**

Name:

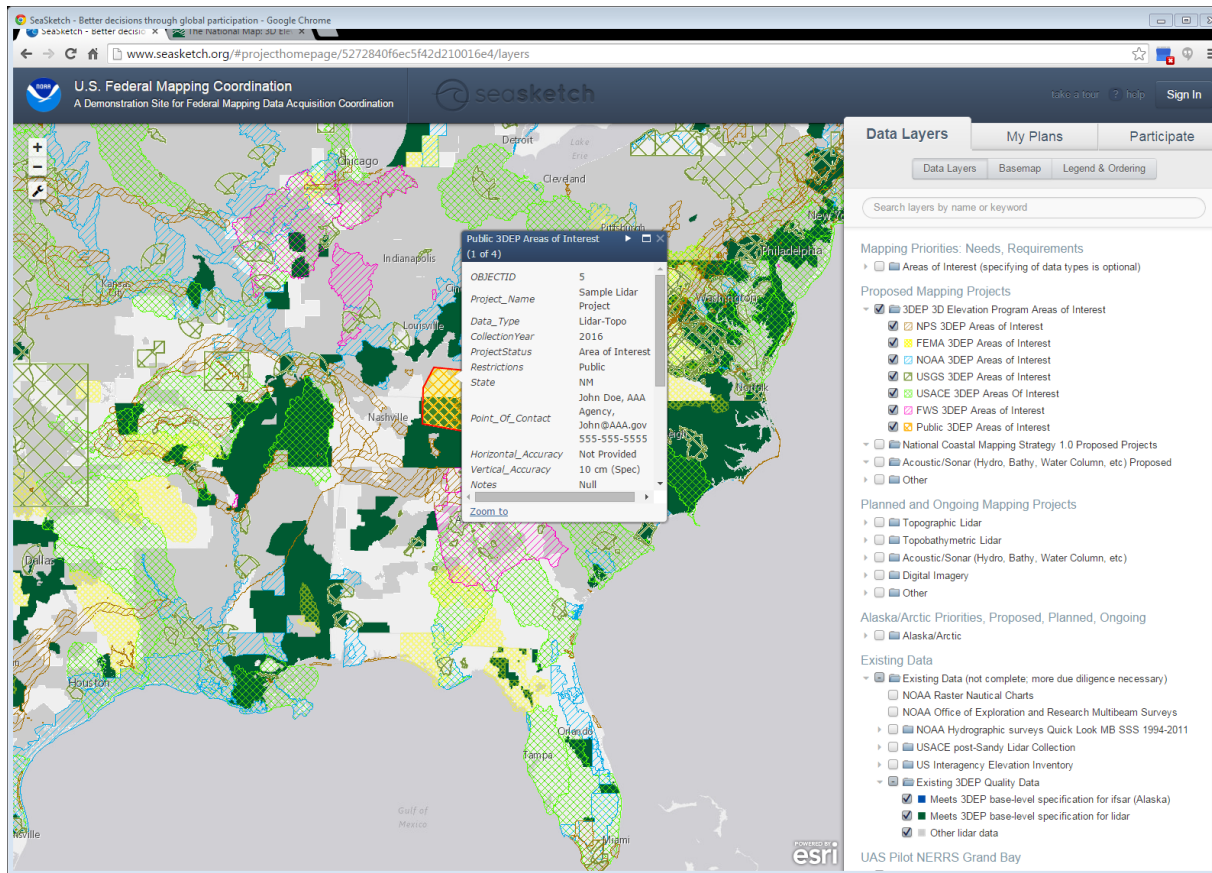
Description Style, Color View Altitude Measurements



# 3DEP FY15 BAA / FY16 Awards

## Project Viewer – SeaSketch

<http://seasket.ch/hwpR3E-MxO>




+ <http://seasketch.ch/hwpR3E-MxO>


19

Inbox (689) - chickman@... State/Regional Workshop x SeaSketch - Better decisio x

www.seasketch.org/#projecthomepage/5272840f6ec5f42d210016e4/layers

Apps CGE - Concur Soluti... Calendar

 **U.S. Federal Mapping Coordination**  
A Demonstration Site for Federal Mapping Data Acquisition Coordination

 seasketch

take a tour ? help Sign In

**Data Layers** My Plans Participate

Data Layers Basemap Legend & Ordering

Search layers by name or keyword

**Mapping Priorities: Needs, Requirements**

- ☐ Areas of Interest (specifying of data types is optional)

**Proposed Mapping Projects**

- ☒ 3DEP 3D Elevation Program Areas of Interest
  - ☒ NPS 3DEP Areas of Interest
  - ☒ FEMA 3DEP Areas of Interest
  - ☒ NOAA 3DEP Areas of Interest
  - ☒ USGS 3DEP Areas of Interest
  - ☒ USACE 3DEP Areas Of Interest
  - ☒ FWS 3DEP Areas of Interest
  - ☒ Public 3DEP Areas of Interest
- ☐ National Coastal Mapping Strategy 1.0 Proposed Projects
- ☐ Acoustic/Sonar (Hydro, Bathy, Water Column, etc) Proposed
- ☐ Other

**Planned and Ongoing Mapping Projects**

- ☐ Topographic Lidar
- ☐ Topobathymetric Lidar
- ☐ Acoustic/Sonar (Hydro, Bathy, Water Column, etc)
- ☐ Digital Imagery
- ☐ Other

**Alaska/Arctic Priorities, Proposed, Planned, Ongoing**

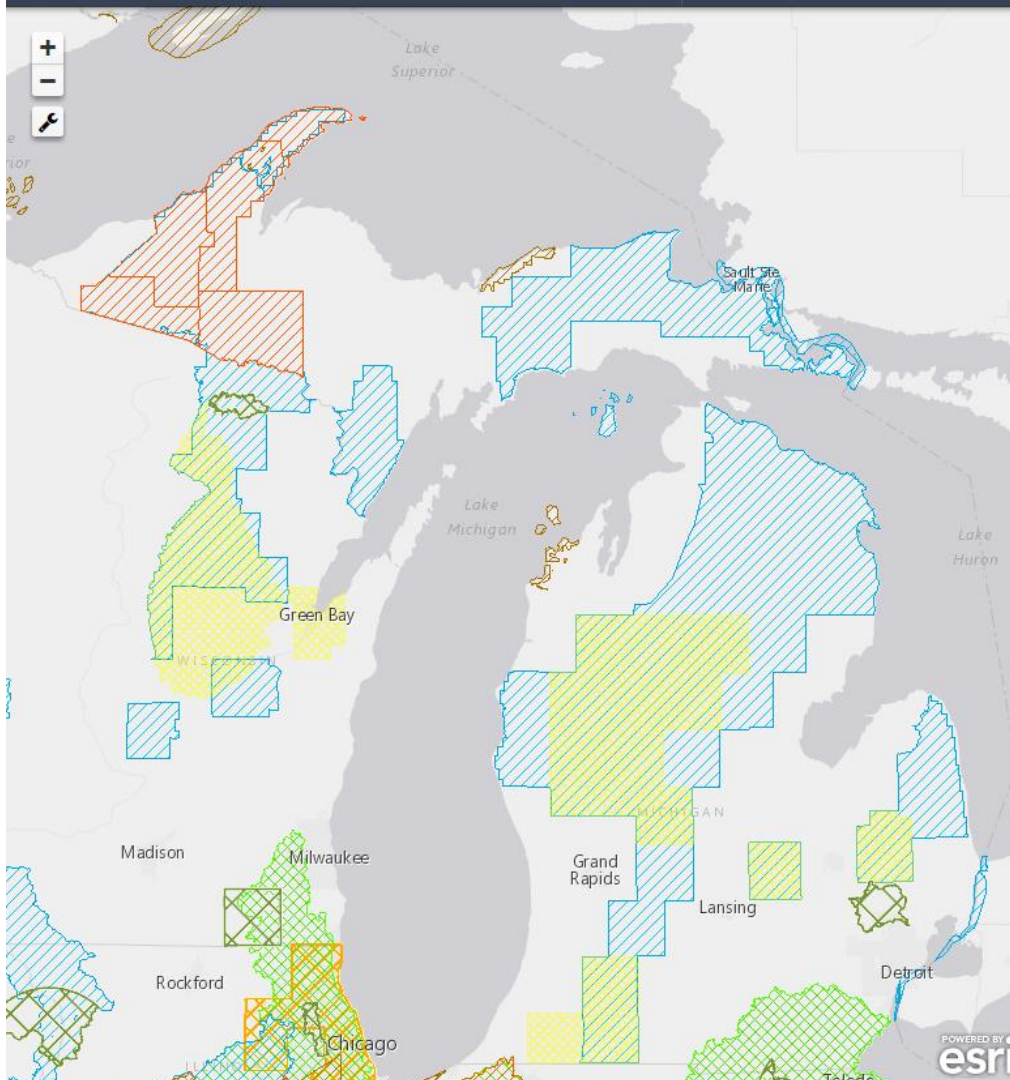
- ☐ Alaska/Arctic

**Existing Data**

- ☐ Existing Data (not complete; more due diligence necessary)

**UAS Pilot NERRS Grand Bay**

- ☐ GRAND BAY NERR



# + Michigan 3DEP State/Regional Coordination Workshop

## On-going State Coordination Efforts - Michigan

State of Michigan – Everett Root

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## Presentations by potential project submitters

Michigan Geological Survey - John Yellich

- Cass County, to include all southern Michigan - two tiers of counties for geologic mapping and resource studies, aggregates, water. Also, the UP from Mackinaw County west to Ironwood/Wisconsin border.

Spicer Group – Ronald Hansen

- MACDC strategic plan and Saginaw Bay

USDA NRCS - Martin Rosek

USGS Michigan – Cynthia Rachol

Others –

# + Michigan 3DEP State/Regional Coordination Workshop


- Open discussion
- Collaboration among potential partners




Inbox (689) - chickman@... State/Regional Workshop x SeaSketch - Better decisio x

www.seasketch.org/#projecthomepage/5272840f6ec5f42d210016e4/layers

Apps CGE - Concur Soluti... Calendar

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  - ☒ USGS 3DEP Areas of Interest
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**Alaska/Arctic Priorities, Proposed, Planned, Ongoing**

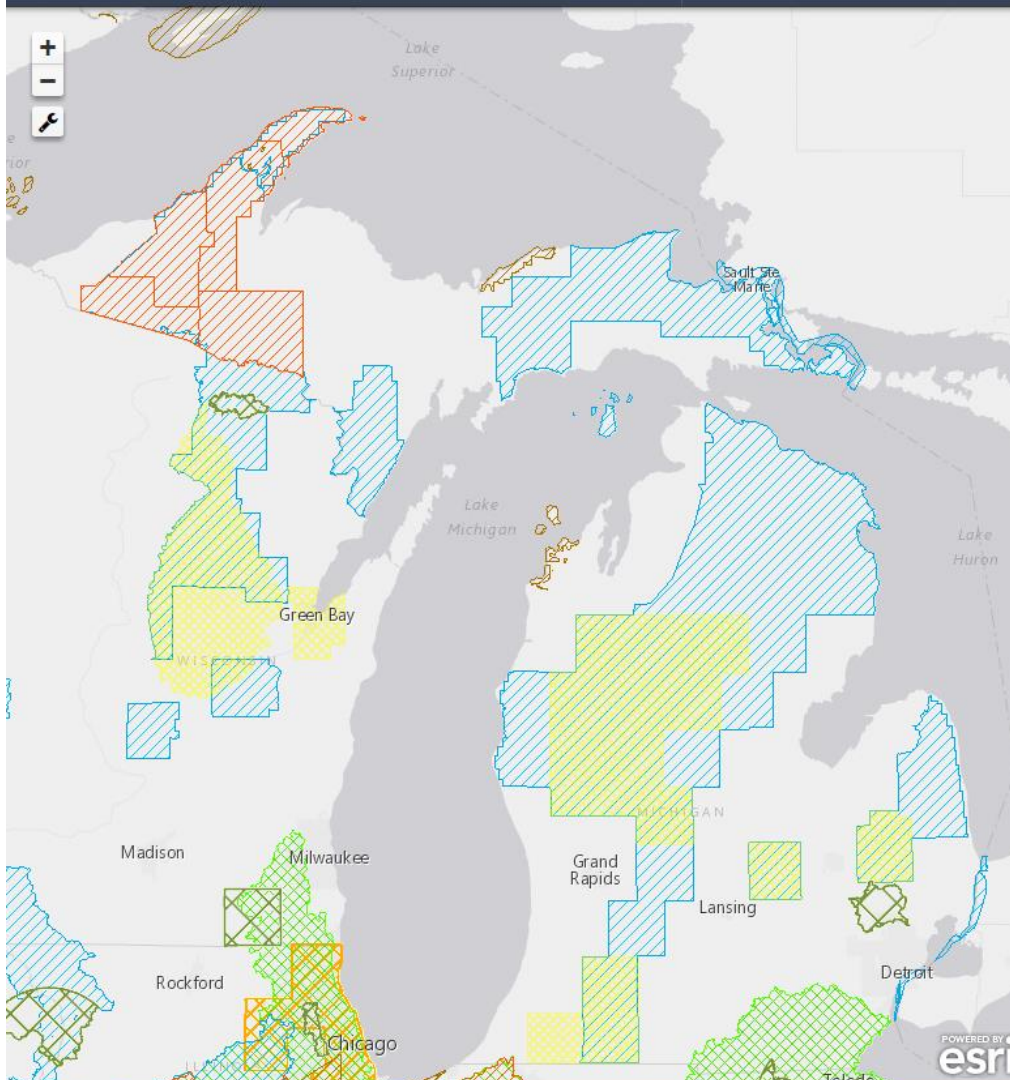
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**Existing Data**

- ☐ Existing Data (not complete; more due diligence necessary)

**UAS Pilot NERRS Grand Bay**

- ☐ GRAND BAY NERR



POWERED BY  esri

Quality Levels (QL)	Source	Point Density (pts/m <sup>2</sup> )	Nominal Pulse Spacing (NPS) (m)	DEM Post Spacing (arc-sec, m)	Vertical RMSEz (cm)	Equivalent Contour Accuracy (ft)
QL1	lidar	8	0.35	1/27, ~1	9.25	1
QL2	lidar	2	0.7	1/27, ~2	9.25	1
QL3	lidar	1 – 0.25	1 – 2	1/9, ~3	≤ 18.5	2
QL4	images	0.04	5	1/3, ~10	46.3 – 139	5 – 15
QL5	IfSar	0.04	5	1/3, ~10	92.7 – 185	10 – 20



**The National Map**  
Your Source for Topographic Information

gs\_baa@usgs.gov





## **Federal Agency Representatives for 3DEP Priorities (subject to change)**

**USGS - Diane Eldridge**

**NRCS - Bill Marken (soon to USGS)**

**– [Steve Nechero, Collin McCormick]**

**USACE - Nancy Blyler**

**FEMA - Paul Rooney**

**NOAA - Kirk Waters, Ashley Chappell**

**BLM - Brian Hadley**

**Forest Service - Everett Hinkley**

**USFWS - Kenny Elsner**

**NGA - Sandy Mitchell**

**NASA - Dave Harding**

**OSMRE - Chris Benson**

**FCC - Don Cambell**

**EPA - Craig Seaver**